27. Comments on FFMP.

- FFMP has been useful on occasion. It shows promise and I believe additional development would be great.
- 2. Excellent application, used in real-time during warning situations. But training from the national level is non-existent. Need to know how FFMP really works from the inside out.
- 3. big improvement over previous FF "tools"...
- 4. We continue to receive Basin Maps with errors in them. Combine SCAN into WarnGen and FFMP in WHFS or Hydroview.
- 5. answers are based on fact of drought conditions
- 6. Personal use of FFMP has been very very limited.
- 7. FFMP is too new to provide any measured feedback. From what little I have seen, as a monitoring program, it could have useful information. As with most new software the logic..ie ease of use...of the GUI display is important because people do not want to jump through hoops or go through some convoluted GUI sequence to display what they are after.
- 8. never used this application.
- 9. In contrast to SCAN, FFMP provides new information not otherwise available, and thus I use it more frequently and have been quite satisfied so far. We are planning a major training effort at DVN this spring since we have our basin customization files, so I expect to see FFMP usage increase greatly this year.
- 10. Could be faster, but it does the job highlighting areas of high rainfall and rainfall rates. The naming of the basins needs to be improved...some way we can tell where the heck the location is.
- 11. We have yet to have any significant precipitation to adequately evaluate this software and it's usefulness.
- 12. Likewise with the SCAN program, FFMP is a memory hog. However, since FFMP is more of a flooding tool, it has the added benefit for longer analysis than SCAN.
- 13. Comments on FFMP go here. This is a test.
- 14. We're coming out of a drought so I reserve jusgement, but training demonstrations indicate there could be some value in this application.
- 15. too new, never used to know about it.
- 16. 1.) Would be nice to be able to change FFG. I think this is coming though. 2.) Would be nice to have more GIS functions in FFMP (as in AMBER)
- 17. It's a system hog for aging HP hardware. Perhaps when we upgrade the workstations and servers to linux, this application could take on new life.

- 18. I haven't had a lot of experience thus far with this application. Although, the times I have used it, it has proven to be helpful in identifying particular basins of concern. I think the GUI could be a little more user friendly in regards to calling up particular basin information. It would also be nice to see county names listed in table instead of numbers. Also, what about a plot showing basins downstream that will eventually be affected?
- 19. WE ARE STILL WORKING ON GETTING OUR FFMP OPERATIONAL SO I HAVE NOT HAD MUCH TIME TO CRITIQUE IT YET. SINCE I AM STILL LEARNING TO USE IT, I WOULD BE BETTER OFF NOT ADDED COMMENTS THAT MAY JUST BE FROM FRUSTRATION AND LEARNING!!!!
- 20. Intro to FFMP was touched on at the same teletraining session as SCAN, but I don't recall our staff ever having a more formal training session (either nationally or locally).
- 21. I have not used FFMP to a great extent, but am looking forward into incorporating it into our operations this year. FFMP training with all forecasters is currently planned for early Spring, and we will hopefully see some benefit from the use of this application as the year progresses.
- 22. The field offices should NOT have to choose wheather they want to view all the basins at once or have better performance. It should be required to have both! These applications are supposed to help save life and property therefore should be developed with that in mind!
- 23. I have not used FFMP and have not had a chance to use it. Thus, my comments are neutral/NA.
- 24. have not had any heavy rainfall events since training received. (We're in a drought!)
- 25. Not in use at DVN.
- 26. NOT ENOUGH TIME SPENT TO COMMENT
- 27. I've only used FFMP on a few occasions so I am not very familiar with all its features. It certainly does appear to be an effective flood monitoring tool. We need some training.
- 28. We will begin using FFMP this spring, after some upcoming training sessions. It looks very promising.
- 29. Have not had much experience with FFMP drought!
- 30. Have little experience with FFMP.
- 31. A few problems do to processor speed. But of the MDL applications we use this is by far the simplest and most useful.
- 32. Just a resource hog that clutters up the screen. Prefer a product ike a derived radar product that we can zoom in on or load into a D2D raphic screen. The information it provides is useful but the extra steps to invoke it and screen space it takes up negates its usefulness.
- 33. We are just coming out of a 3 year drought. We just recently had this application installed, so I haven't had a chance to use it operationally yet. If it's like the other programs, I'm not hopeful for it's usefulness.
- 34. I have only used it a few times but from what I have seen, it seems to be a pretty good program.
- 35. Not a lot of experience with it yet...and we are REALLY flat, so flash flooding isn't as big a problem as

some areas.

- 36. Very useful application, but need training guidance in operation use. I look forward to the "next generation".
- 37. I have had limited opportunity due to weather events to fully appreicate the capability or limitations of the program. It was useful at times, and especially useful during one event where the HMT was able to monitor the flooding potential while I was occupied with Severe Thunderstorm Warning/Statements.
- 38. I briefly used this application while working back in Albany over a year ago. I liked the idea of this program and the execution.
- 39. Performance is unacceptable. We have not been able to use in real events because it eventually brings the workstation to a grinding halt. Software that does this CANNOT be deployed because it degrades our ability to do our job during important operations.
- 40. I have no idea how to use FFMP or it's capabilities. I have not seen any information disseminated on its use.
- 41. basins are not defined correctly or named correctly. rivers or streams are not indicated on the map.there was no training in how to use the program either. rainfall is only based on radar right now so is not very reliable. graphs are not easily used or read. Editing the basin maps is not going to be easy.
- 42. so far so good. Would like to see more training and documentation for FFMP.
- 43. I replied neutrally for the most part because I think while FFMP has proven useful, there is plenty of room for improvement. Performance is one of the big concerns. Also, there are signifineant gaps in basins that have been assigned FFG, and we need the ability to manually edit FFG (especially the 1-hr for mountainous terrain). The monitoring capability of the FFMP basin tables is probably overall the most useful feature. We are starting to use Paul Jendrowski's version of the AMBER program on AWIPS and also within Arcview on a PC more than FFMP.
- 44. With few hydrological issues in northern Michigan, I have not had to use FFMP, I didn't even know that FFMP was working.
- 45. FFMP would be more helpful if there was the ability to pull the information (i.e., Buck Creek in Mason county will likely experience flooding") directly into Warngen. The FFMP window needs the ability to expand vertically. Is there any way to update the D2D image without having to hit the 'refresh D2D' button?"
- 46. Way too cluncky.
- 47. FFMP definitely shows some promise. If there were a way to sample basins and derive geographical/political references from them, the data from FFMP would actually be directly translatable to warnings. By giving the geographical references to creeks, streams, towns, etc the forecaster can then take that information and include it in warnings and statements that may be issued. In addition, the ability to issue hydrologic warnings through FFMP with basin/geographic information would improve the quality and value of our hydrologic warnings.
- 48. We do not have FFMP configured at this time
- 49. I (we) have not used this program yet.

- 50. I rarely use FFMP operationally. The few times that I've seen other staff members use it operationally...it has been to the detriment of operations. I would use it more often if two things changed. First, it would be easier to be able to scroll through the counties by name (and not FIPS or zone number) in the FFMP Basin Table. Second, using the really small scale basins in FFMP with the current relatively course resolution of radar-based precipitation accumulation data that we have available is disturbing to me. If the radar data resolution that we had available to us was increased to something even remotely close to the resolution of the basins in FFMP, then maybe I would consider using FFMP. I assume that the reason that this hasn't been done yet is due to AWIPS and WSR-88D response time issues. It appears to me that the displays in FFMP look worse" (more of a flash flood risk) than what actually is occuring. "
- 51. Just starting to use this application.
- 52. WE USE AMBER HERE, NOT FFMP.
- 53. We haven't used this at our office yet.
- 54. while ffmp has been a big stride in helping to monitor potential flood situations the program still needs improvement. The labels on the counties need to be changed to county names instead of fips numbers.
- 55. Have not used this feature.
- 56. Not very useful if can not change the flash flood guidance of individual basins
- 57. FFMP has been available here at DTX since September 2001 but my personal experience with the application is very limited at this time. I plan to become more familiar with its operation and performance this year.
- 58. this program is very useful. only comment is that it would be nice to be able to see storm total precip on there. right now only first 6 hours of rainfall allowed in chart.
- 59. What do you mean in 25a by FFMP performance? I consider ability to view all basins at once as part of FFMP performance. Other comments are similar to the SCAN comments above."
- 60. Somewhat limited exposure since moving out of the Service Hydrologist rank and into the SOO after all, the Northeast has been in a drought the past 15 months! But from what we've seen operationally, I'm encouraged by the amount of information available to us.
- 61. It is a good start and can provide you with useful information, if your precipitation estimates are good.
- 62. FFMP wasn't available at DVN for an extended period of time due to lack of high resolution basin maps. The maps are now available, so I plan to start working with FFMP.
- 63. I have not received training on how to use FFMP. I just came from another Region so there is a possibility that they had training on FFMP here prior to my arrival.
- 64. I am looking forward to utilizing this feature this year.
- 65. Have never used.
- 66. Only one or two people in our office have had in depth training. The times I have tried to use it, it has been hard to get to the basins I was interested in, and the data have not been too useful.

- 67. Same as SCAN. Don't have hardware in field to adquately run. RFC TUR provide similar info which is sufficient for warning operations.
- 68. No comments at this time. Have not used FFMP in a live flood event. From what little I have seen it holds promise and I look forward to using this next storm season.
- 69. Have never used it.
- 70. It contains information that is of limited use in critical situaions. It also requires so much time consuming local editing of basins with GIS software, that is a daunting task at best. I can't use basins that have no names and cannot give names to basins as I work 40% shifts and have too much other to do in the remaining 60%. I can't keep data flowing from the DHR and FFG into the system, either.
- 71. FFMP is a good program...it has helped tremendously in flood sitns. The GUI's and tables are all laid out well. Again...if I run it...it bogs my machine down significantly...so I cannot run it in big events. Sometimes it is a ways off in its estimates...but I can overlook that and use it as a guide. Overall...I am pleased with FFMP and the idea behind it.
- 72. Application is very slow on hp WORKSTATIONS.
- 73. Operationally...only as good as NCRFC data...local knowledge is always better for local river basin decisions. Just know what and when to do. Most times our FFMP doesn't work anyway.
- 74. HAVE NOT USED IT MUCH.
- 75. This program is still new to us and do not have strong opinion either way. Most of the staff do see its potential though. Will have to go through a full rainy season (summer) with it to determine its usefulness.
- 76. We just got FFMP so there is no common frame of reference in order to make an objective evaluation.
- 77. This is a great step forward being able to see estimated rainfall for very small basins. However, it is still only as good as the precip estimate, and the FFG. What the application needs is a way for the user to adjust pcpn estimates and/or FFG on the fly.
- 78. Nice, very nice.
- 79. need to have FFMP ported to the WES, so that training and proficiency can be accomplished.
- 80. We have not really utilized the FFMP at TBW.
- 81. It's a great start with lots of potential for improvement and added features.
- 82. WE USE AMBER FOR FLASH FLOOD DETECTION HERE AT FGZ
- 83. FFMP is showing a lot of promise. TWC relies heavilty on prototype programs like AMBER and QPESUMS, but most of that useful technology is gradually being incorporated into FFMP.
- 84. Little if any training provided to local offices

- 85. Similar to SCAN, it needs to be faster at displaying things. Even more than SCAN, this application needs to be able to be loaded on the WES for looking back at cases and training in playback mode. This is a new way of looking at flash flood warning/guidance and experience needs to be gained in other than real-time. Otherwise, the biggest concerns I've heard have been about the Basin Trend graphic. Using it infrequently, it is difficult to interpret. In particular, the flash flood guidance line" does not seem like the most efficient way of displaying flash flood guidance information. A simple listing of all flash flood guidance (1, 3, 6 hr) at the bottom of the chart would be better than one line for one time period on the graph."
- 86. FFMP is predicated on the notion that FFG is perfect, or at least has some value. In this region, it it is simply not very good, and as a result, the FFMP has really not been thoroughly tested at this site.
- 87. The FFMP application may be more useful than I realize, but I honestly have had little need to view it. We have just not had many flash flood potential situations during the time we have had FFMP at our office.
- 88. Few comments. I have only seen it operationally, and have worked on it, but not actually sat down and used it.
- 89. Our hydrologist is working on FFMP but to my knowledge it has not been used operationally at our office yet.
- 90. Don't use it.
- 91. FFMP has the ability to be a great aid in checking for flood and flash flooding.
- 92. Software is slow but forecasters find the data useful.
- 93. Again, very quiet hydro year, and hence not much chance to utilize the FFMP application.
- 94. A pretty handy application but almost impossible to train someone on unless you have an on-going event. A very powerful but untapped resource.
- 95. I have not used FFMP enough to develop opinions either way. Perhaps if we had more rain here in the Chihuahuan desert...
- 96. Haven't used FFMP. Use 1 and 3 hour rain estimates from radar and flash flood guidance.
- 97. Haven't had much opportunity to use FFMP. It could be a beneficial part of our flood warning decision-making, but its slowness is a big negative factor.
- 98. Did not see too much flash flooding over the last year, so really did not get an adequate test. From what I saw, it preformed well. Again, we had some problems with resources. Ended up having the mesoanalyst use this tool rather than the warning decision meteorologist.
- 99. FFMP takes too long to load, the tables are not very user friendly and the application locks up frequently.
- 100. Program often locks up. Tables lack any logical format.

- 101. We have recently installed AMBER and are using this software in lou of FFMP. AMBER is interfaced with ARCVIEW which allows for much better basin representation than FFMP. The difference between FFMP and AMBER seem to be light years apart. Recommend abandoning FFMP concept and adopting AMBER as the primary means of stream monitoring. FFMP is cumbersome and user unfriendly. The user must constantly jump in and out of individual counties to see the basins, and then basins are chopped off at the county lines...there are no labels, and you can't see the streams. ARCVIEW seems to allow for all of this and from what I can tell, is easially customized where FFMP is not. My reccomendation would be to put ARCVIEW within AWIPS and use AMBER.
- 102. I know the implementation of AMBER functionality is planned, but it would be nice if this implementation was hastened. The integration of MPE into FFMP is imperative. As an attendee of the Basin Customization Course, I find the workload to correct the NSSL provided aggregated and raw basins is immense. Operational personnel have neither the time or equipment resources to complete this task in an expedient timeframe.
- 103. Limited exposure to this app so far due to our drought. However, from what I've seen, I think it will be helpful in flash flood operations.
- 104. Note...we've been in a drought so I have had no reason to use FFMP.
- 105. Again, sent to the field with little or no support.
- 106. FFMP just came on line this fall and with the drought and frozen precip I have not had opportunity to use this application.
- 107. Good program. Runs well. Yields helpful information.
- 108. Why do we need seperate platforms for these different application programs?
- 109. I really have not worked with FFMP enough to rate it good or bad. The one time I really had it up and running, I was still trying to learn it. Therefore I don't want to say I like it or dislike it. I have found, as with the other systems mentioned here, the training and information about it is sparse or difficult to find. New software should come with an easy to use training manual that sits in front of AWIPS for forecasters to use and reference.
- 110. Have not had much chance to use this software. WHat it does seems to be pretty useful though.
- 111. Need to incorporate the functionality of AMBER into it. This includes manually entered FFG, D2D generated graphics, etc. Although I do know some of these are coming, I don't understand how one person (Paul Jendrowski) can out program a team of programmers. Since this has been the case, maybe a little cooperation and consultation should be utilzed.
- 112. N/A
- 113. We have used FFMP a lot for flash flood events especially urban flooding and found it extremely useful when briefing emergency management officials during flooding events.
- 114. Very little experience using this so far, since we have been in a drought.

- 115. I'm assuming FFMP is referring to Hydroview/RiverPro. I wish you had more options for #25. We have never received any training, have had to configure it all on our own, and find it very unreliable (little historical flood data available, find gauge data updates quicker on USGS web sites, software crashes, etc...) Part of our problem is that we have no service hydrologist and are working to get our hydro focal point the training to in turn train the rest of us.
- 116. An email was posted on FFMP, with the option for training available to people who ask for it.
- 117. Haven't really used it.
- 118. Do not know why we need this program.
- 119. We have no flash flood guidance for our CWA, so that limits the usefulness of FFMP to some degree.
- 120. None
- 121. I have never seen FFMP.
- 122. I really haven't used FFMP enough to comment.
- 123. We really need FFMP, however again the lack of radar coverage at AFC limits it's useage.
- 124. It could be faster, and a little easier to use.
- 125. The application is to slow for our HP workstations so I do not use it during active weather.
- 126. Don't have cause to use it much.
- 127. Flash Flood Guidance is some of the worst guidance we have. Thus, anything that uses this guidance is of doubtful quality. FFMP has not been used much in this office because we just recently received good basin data.
- 128. Needs to run fast. Would be nice if it could be fully implemented. Then I think more forecasters would use it.
- 129. We have not really tried the FFMP, because we never really saw the utility of the program.
- 130. Again the issue I have with FFMP is the resources it takes from the HPs.
- 131. We don't have flash flood guidance.
- 132. Dont use but heard good things about it. Again Hardware cannot handle it.
- 133. The basins are not very good. We have a large lake that is divided into about a hundred" basins. Some of the basin are not named. We have our DAPM working on fixing the names, but he has not touched the lake, basins that cross rivers, etc. FFMP is slow. However, it was useful for a heavy rain event we had."
- 134. We have not had a chance to use FFMP at our office yet. This year will be the first year that we will use FFMP. We have been in a drought and have not had any flooding the last couple of years. I am looking forward to using FFMP.

- 135. Great tool. Many of our customers have requsted more detail in the flash flood warnings we issue, and FFMP will, hopefully, allow us to better pinpoint areas of flooding. The only negative comment I have is that it seems to be a big 'resource hog' and slows down AWIPS
- 136. Provides a good monitoring and heads up tool for monitoring potential hydrology problems associated with convective events.
- 137. Have not used it enough to have strong opinions either way...but definitely not looking at the infolist OR the users manual
- 138. Just got this capability and have not had the need to use it yet.
- 139. FFMP DOES A GOOD JOB OF SHOWING WHAT BASINS ARE RECEIVING THE RAIN AND WHICH PART OF THE COUNTY IS MOST AFFECTED. UNFORTUNATLY FFMP IS ONLY AS GOOD AND THE FLASH FLOOD GUIDANCE.
- 140. FFMP last season was quite slow and useful only on the Linux boxes in the office. I prefer to use it in a triage" mode and help pick out areas of concern (often with respect to rainfall as a percentage of flash flood guidance). As such I prefer to see all basins and have the ability to continue to control the color curve so basins approaching and/or exceeding my concern threshholds "jump out" at me."
- 141. Again, don't know enough about the program to use it.
- 142. Same arguements as stated above for SCAN. Adding too much software without sufficient hardware to support it.
- 143. Can't comment too much as we just getting going with FFMP this year. Utility does look plausible but will it be like SCAN? We have very limited flooding and thus FFMP may only be used occasionally initially.
- 144. I expect to use FFMP when we get out of our present drought and have flash flooding. I have too little experience with it to make useful comments.
- 145. This appears to be another duplicate of the stage III data in hydroview.
- 146. We have just recently started using FFMP. It would be nice to have formal training for someone in the office. This can be a potentially valuable tool, but it does still run a little slow as far as display goes. I do not like having to zoom into the basins on a county-by-county basis. Hydrology does NOT follow political boundaries. If you are tracking a flood through basins that go across county lines, you have to zoom back out of one county, zoom back into the next county, and figure out which basin you need to look at again. This takes too much time. You should be able to follow the flow from one basin to the next, without all the extra steps. When I was first working with scan, I found it difficult to get the detailed graph up for basins that I did not know the name for. With that many basins, our staff can not be expected to know them by name. A simple left click on a basin should be used to bring up the graph, instead of all the extra steps to make the map editable, etc. Time is of the essence, and the fewer steps, the better. I really like the graphical display and see FFMP as a potentially very useful tool. The training time and display troubles are the biggest barriers for us. It's very difficult to keep up with all the changes, upgrades and get staff trained. More teletraining sessions, or formal focal point training would be nice to have. THe DHR needs to be added to baseline AWIPS RPS lists, so we don't keep having to add it back in after upgrades.
- 147. I have not received training on FFMP and I do not use it. I cannot offer any opinion at this time.
- 148. I wish we could use FFMP. First we would need the NWRFC to provide us with flash flood guidance.